

REMARKS

The claims have been amended by rewriting claims 1-5, 7-13, 15-17 and 19-21; and canceling claims 6, 14, and 18. Claims 1-5, 7-13, 15-17 and 19-21 remain in the application.

Reconsideration of this application is respectfully requested.

Objection to the Declaration:

A new declaration is included in this mailing.

Objection to the Specification:

The specification is amended as required.

Claim Objections

Claims 12 and 13 were objected to because of informalities.

The informalities are corrected.

Claim Rejections - 35 U.S.C. § 102(b):

Claims 1-21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Narayanan et al. (U.S. Patent 6,076,057).

Claims 1, 12, and 13 have been changed to indicate that an inter-sentence pause of an audio signal is detected, that a characterization is made of a portion of the inter-sentence pause (call it a first characterization for clarity in this description), that the first characterization is compared to a set of non-speech audio characterizations to determine a particular non-speech audio characterization that most closely matches the first characterization, and that the particular non-speech audio characterization is updated to more closely match the first characterization.

In contrast, the method of Narayanan is "for adapting both silence and some/all speech models in a way that results in improved speech-silence discrimination in the new model set" (col. 6, lines 16-18). In Narayanan the entire vectorized audio of one or more speech frames are

run through the whole Markov model set (both speech and non-speech) and the recognition result is used to adapt "both silence and some/all speech models in a way that results in improved speech-silence discrimination in the new model". The result of the method described in Narayanan does not necessarily change any non-speech audio characterization to more closely resemble a characterization of a portion of an inter-sentence pause. Furthermore, when characterizations are updated in accordance with the method of Narayanan, more than just one non-speech audio characterization may be changed. This is substantially different than the invention claimed in Applicants' amended claims 1, 12, and 13, in which a particular non-speech audio characterization that most closely matches the characterization of the portion of the inter-sentence pause is modified after an inter-sentence pause of an audio signal has been detected, independently from the result of speech recognition of the audio signal as in Narayanan's description.

Claim 10 is changed to include "a comparer and updater coupled to the detector for receiving the predetermined signal and in response thereto determines a mean of a multi component Gaussian mixture associated with background sounds that is closest to a feature vector that characterizes the audio signal during the absence of speech sounds, and updates the mean so that the mean is closer to the feature vector that characterizes the audio signal during the absence of speech sounds."

There is no reason to conclude from Narayanan that the result of the method described therein is necessarily a change to mean of a multi-component Gaussian mixture to become closer to a feature vector that characterizes the portion of the inter-sentence pause. Furthermore, when characterizations are updated in accordance with the method of Narayanan, more than just one non-speech audio characterization may be changed. This is substantially different than the invention claimed in Applicants' amended claim 10, in which a particular non-speech audio characterization that most closely matches the characterization of the portion of the inter-sentence pause is modified after an inter-sentence pause of an audio signal has been detected, independently from the result of speech recognition of the audio signal as in Narayanan's description.

For these reasons. Applicants believe that amended claims 1, 10, 12, and 13 are patentable, and therefore that claims 3-5, 7-9, 11, and 15-21 are patentable, inasmuch as each is dependent on one of amended claims 1, 10, 12, and 13.

Accordingly, this application is believed to be in proper form for allowance and an early notice of allowance is respectfully requested.

Applicant notes that any amendments or claim cancellations made herein and not substantively discussed above are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change in the Applicant's position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such amendments or cancellations not substantively discussed. Furthermore, any remarks made herein with respect to a given claim or amendment are intended only in the context of that specific claim or amendment, and should not be applied to other claims, amendments, or aspects of Applicant's invention.

Applicant specifically reserves the right to prosecute claims of differing and broader scope than those presented herein, in a continuation application.

Please charge any fees associated herewith, including extension of time fees, to 502117.

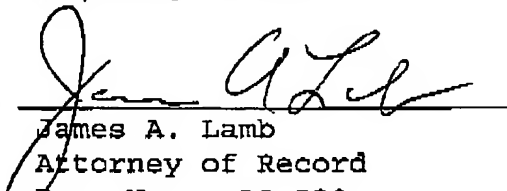
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